BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Development of SWD drains in Ward No 06 Byatarayanpura Sub Division

Est Cost: 60 .00Lakhs

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M2100-1.1. Earth work in excavation for foundation of structures such as culverts, bridges etc., as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications I. Ordinary soil - A. Manual Means (i) Depth upto 3m MORTH Specification No. 304 including disposal of excavated earth upto a distance of 23km including loading and unloading charges(P.No.209, I.No.27.1 of PW,P&IWTD S.R 2016-17))								
		Cum							
	SWD from ch 0-119		1	119.00	2.00	1.50	357.00		
	SWD from ch 119-264		1	145.00	2.00	1.90	551.00		
							908.00		
	Consider 60% of Qnty						544.80		
	Total Qty	Cum					**544.80**	248.84	**135568.03**
	Basic rate	123.00							
	Area Weightage 8%	9.84							
	Loading and unloading with 15km lead= 68+2.5x1.28x15 = 116.00	116.00							
	Total Rate	**248.84**							
2	KSRRB M2100-5.1. Earth work in excavation for foundation of structures as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications. "V. Marshy soil - A. Manual Means Upto 3 m depth MORTH Specification No. 304P.No.209, I.No.27.12 of PW,P&IWTD S.R 2016-17))								
		Cum							
	Consider 40% of the Qnty						363.20		
	Total Qty	Cum					**363.20**	566.36	**205701.95**
	Basic rate	417.00							
	Area Weightage 8%	33.36							
	Loading and unloading with 15km lead= 68+2.5x1.28x15 = 116.00	116.00							
	Total Rate	**566.36**							
3	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift, complete as per specifications, specification. No. KBS (P.No.6, I.No.2.15 of PW,P&IWTD S.R 2016-17))								
		Cum							
	SWD from ch 0-119		1	119.00	1.70	0.30	60.69		
	SWD from ch 119-264		1	145.00	1.70	0.30	73.95		
							134.64	2283.12	**307399.28**
	Basic rate	2114.00							
	Area Weightage 8%	169.12							
	Total Rate	**2283.12**							

Sl No	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
4	KSRRB M2100-13. Plain / Reinforced Cement Concrete M15 with OPC cement @ 240kgs, with 40mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @ 0.56cum in Open Foundation complete as per Drawing and Technical Specifications MORTH Specification No. 1500,1700 & 2100.(P.No.211, I.No.27.24 of PW,P&IWTD S.R 2016-17)								
		Cum							
	SWD from ch 0-119		1	119.00	1.40	0.15	24.99		
	SWD from ch 119-264		1	145.00	1.40	0.15	30.45		
							55.44	6340.68	**351527.30**
	Basic rate	5871.00							
	Area Weightage 8%	469.68							
	Total Rate	**6340.68**							
5	Diversion of water course by providing Coffer dams or bunds or islands as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., complete.(1.50 mtrs depth below LWL.)(P.No.257, I.No.37.41.1 of PW,P&IWTD S.R 2016-17)								
		Cum							
			1	264.00	1.50	1.50	**594.00**	289.44	**171927.36**
	Basic rate	268.00							
	Area Weightage 8%	21.44							
	Total Rate	**289.44**							
6	KSRRB M2100-17.2. Plain / Reinforced Cement Concrete idesign mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008,Open Foundation complete as per Drawing and Technical Specification Case - II : With Batching Plant, Transit Mixer and Concrete Pump MORTH Specification No. 1500,1700 & 2100P.No.213, I.No.27.31 of PW,P&IWTD S.R 2016-17)								
	Raft Concrete	Cum							
	SWD from ch 0-119		1	119.00	1.40	0.25	41.65		
	SWD from ch 119-264		1	145.00	1.40	0.25	50.75		
	Wall Concrete								
	SWD from ch 0-119		2	119.00	0.25	1.00	59.50		
	SWD from ch 119-264		2	145.00	0.25	1.20	87.00		
							238.90	6570.72	**1569745.01**
	Basic rate	6084.00							
	Area Weightage 8%	486.72							
	Total Rate	**6570.72**							
7	KSRRB M2200 -6 Supplying , fitting and placingTMT bar Fe 550 reinforcement in sub-structure complete as per drawing & technical specification complete as per the specification . MORTH Specification No.1600 & 2200(P.No.218 , I.No.28.8.3 of PW,P&IWTD S.R 2016-17)								
	Consider 80kg/cum for SWD	Tonne		238.90	--	0.080	19.11		
							19.11	68473.08	**1308520.56**
	Basic rate asper issue rate 1-07-17	63401.00							
	Area Weightage 8%	5072.08							
	Total Rate	**68473.08**							
8	KSSRB M220 - 8. Providing weep holes in Brick masnory / Plain / Reinforced concrete abutment, wing wall / return wall with 100mm dia AC pipe, extending through the full width of the structure with slope of 1V:20H towards drawing foce. Complete as per drawing and Technical specifications complete as per specifications. MORTH Specification No. 2706 & 2200 (P.No.218, I.No.28.10 of PW,P&IWTD S.R 2016-17))								

Sl No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
		No./Mtr							
	Box	2	125		--	--	250.00		
	(120/2)*2 = 120								
							250.00	181.44	**45360.00**
	Basic rate	168.00							
	Area Weightage 8%	13.44							
	Total Rate	**181.44**							
9	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 including disposal of excavated earth upto a distance of 23km including loading and unloading charges(P.No.133, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	LHS	Cum							
	Culverts Earthwork		7	8.50	2.00	1.05	124.95		
	Desilt main road Rhs		1	165.00	0.60	0.78	77.22		
	Lhs		1	183.00	0.60	0.75	82.35		
	Cross road 1 LHS		2	95.00	0.60	0.70	79.80		
	Cross road 2 LHS		2	115.00	0.60	0.70	96.60		
	Cross road 3 LHS		2	105.00	0.60	0.70	88.20		
	Cross road 4 LHS		2	100.00	0.60	0.70	84.00		
	Overburden earth		1	150.00	3.50	0.70	367.50		
							1000.62	204.56	**204686.83**
	Basic rate	82.00							
	Area Weightage 8%	6.56							
	Loading and unloading with 10km lead= 68+2.5x1.28x15 = 116.00	116.00							
	Total Rate	**204.56**							
10	Removing and refixing stone slabs of drains and pointing in CM (1:3)								
	LHS	sqm							
	Desilt main road		1	165.00	1.80		297.00		
	Desilt main road		1	183.00	1.80		329.40		
	Cross road 1 LHS		2	95.00	1.80		342.00		
	Cross road 2 LHS		2	115.00	1.80		414.00		
	Cross road 3 LHS		2	105.00	1.80		378.00		
	Cross road 4 LHS		2	100.00	1.80		360.00		
	Consider 30% damaged and Missing						-636.12		
	For cover infront of residences		2	150.00	1.20		360.00		
	Consider 25% damaged and Missing						-90.00		
							1754.28	82.08	**143991.30**
	Basic rate	76.00							
	Area Weightage 8%	6.08							
	Total Rate	**82.08**							
11	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete I.No 5.31.1page no 25								
	LHS	sqm							
	Consider 20% damaged and Missing						636.12		
							636.12	678.24	**431442.03**
	Basic rate	628.00							
	Area Weightage 8%	50.24							
	Total Rate	**678.24**							
12	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete I.No 5.31.2page no 25								
	LHS	sqm							

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Consider 20% damaged and Missing						90.00		
							90.00	841.32	**75718.80**
	Basic rate	779.00							
	Area Weightage 8%	62.32							
	Total Rate	**841.32**							
13	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Bed Concrete	Cum							
	Culverts		7	8.50	2.00	0.15	17.85		
							17.85	5449.68	**97276.79**
	Basic rate	5046.00							
	Area Weightage 8%	403.68							
	Total Rate	**5449.68**							
14	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17)								
		Cum							
	culvert		14	8.50	0.60	0.90	64.26		
							64.26	4521.96	**290581.15**
	Basic rate	4187.00							
	Area Weightage 8%	334.96							
	Total Rate	**4521.96**							
15	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.112, I.No.15.1 of PW, P&IWTD S.R 2016-17)								
		Sqm							
	culvert		14	8.50		0.90	107.10		
							107.10	104.76	**11219.80**
	Basic rate	97.00							
	Area Weightage 8%	7.76							
	Total Rate	**104.76**							
16	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)								
	Coping	Cum							
	culvert		14	8.50	0.60	0.100	7.14		
							7.14	5876.28	**41956.64**
	Basic rate	5441.00							
	Area Weightage 8%	435.28							
	Total Rate	**5876.28**							
17	Providing and fixing **RCC Precast cover slab of 250mm thick** for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Culvert Slab	Sqm							

Sl. No	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in	Amount in
				m	m	m		Rs.	Rs.
	New Culvert		7	8.50	1.80	--	107.10		
							107.10	5111.00	547388.10
								Total Construction Cost	5940010.930
18							Cost towards PMC / Third Party inspection LS		59401.00
								Sub Total	5999411.93
19							Miscellaneous and rounding off		588.07
								Total	6000000.00

Certificate.

1 *The workspot was inspected and work is found to be necessary.*
2 *The area comes within the Bruhat Bangalore Mahanagara Palike limits.*
3 *The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.*
4 *The provisions made in the estimate are necessary and essential.*

Assistant Engineer
ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

Assistant Executive Engineer
ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-24

Executive Engineer

ADMINISTRATIVE APPROVAL

Accorded For Rs. Sixty lacs only

Head of A/c. P-3297

Div. Ref. No. 198/17-18 Date 13/03/18

AE

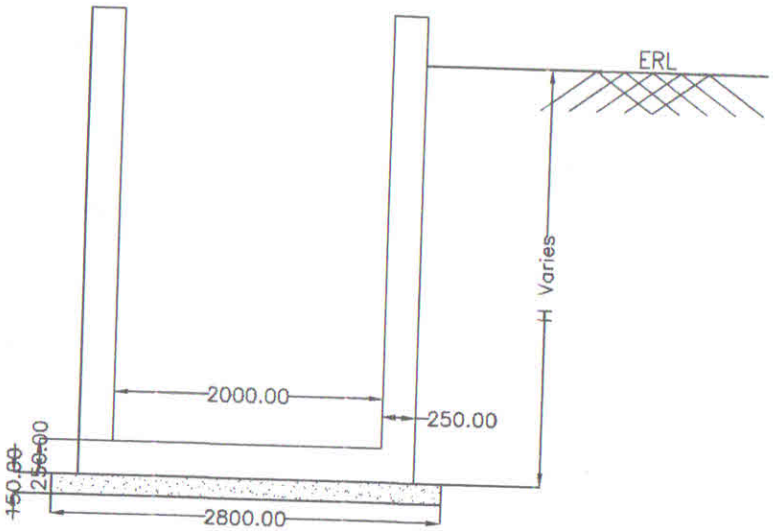
EE(BTP) 13/03

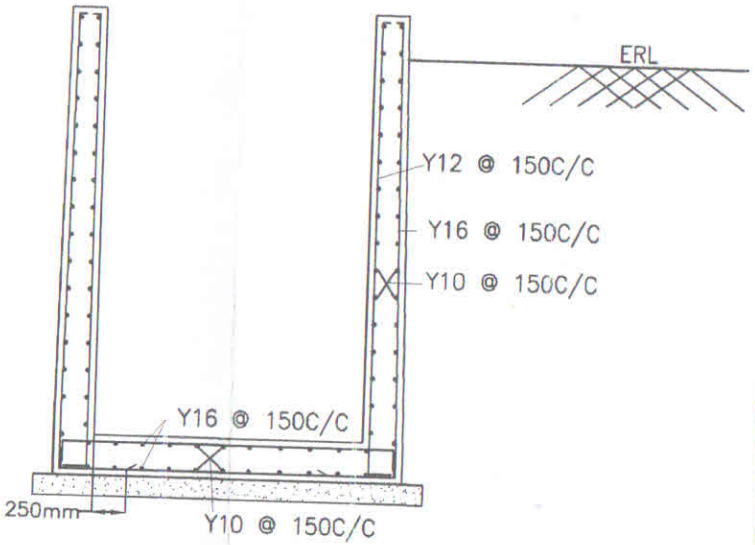
Technical Sanction
Accorded For Sixty lacs only
Head of A/C P-3297
CER NO :TS/ /17-18 Dt:

TA CE (YNK)

BRUHAT BANGALORE MAHANAGARA PALIKE

Development of SWD drains in Ward No 06 Byatarayanpura Sub Division





ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-26

NOTE:-
1. ALL DIMENSION & LEVELS ARE Mts. UNLESS OTHERWISE MENTIONED.

DATE	No. OF PRINTS	PRINTS ISSUED TO	SIGN

DATE	REVISION	DESCRIPTIONS	SIGN

LEGEND:

CONSULTANT :

TITLE: CONCEPT PLAN